



U.S. Department
of Transportation

400 Seventh Street, S.W.
Washington, D.C. 20590

**Research and
Special Programs
Administration**

JUL 8 2004

DOT-E 9659
(FIFTH REVISION)

EXPIRATION DATE: June 30, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Kaiser Compositek, Inc.
(Wholly Owned Subsidiary of United Defense Industries)
Brea, California
(Former Grantee: Compositek Engineering Corporation)
2. PURPOSE AND LIMITATION:
 - a. This exemption authorizes the manufacture, marking, sale, and use of a non-DOT specification cylinder to be used for the transportation in commerce of certain Division 2.2 materials. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.302a(a)(1), § 173.304a(a) and (d), and § 175.3 in that a non-DOT specification cylinder is not authorized except as specified herein.
5. BASIS: This exemption is based on the application of Kaiser Compositek, Inc. July 2, 2004 submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

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Hazardous materials description - - proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Air, compressed	2.2	UN1002	N/A
Argon, compressed	2.2	UN1006	N/A
Carbon dioxide	2.2	UN1013	N/A
Compressed gases, n.o.s.	2.2	UN1956	N/A
Helium, compressed	2.2	UN1046	N/A
Hydrogen, compressed	2.1	UN1049	N/A
Liquidfied gases, n.o.s.	2.2	UN3163	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Oxygen, compressed	2.2	UN1072	N/A

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a non-DOT specification fiber reinforced plastic (FRP) full wrapped (FC) composite cylinder made in accordance with Compositek Engineering Corporation's Part Numbers CX 00405, CX 00406, CX 00407 or CX 00408, on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA) and conforming with DOT FRP-1 Standard, (§ 178.AA), Revision 2 dated February 15, 1987, except as follows:

§ 178.AA-5 Material.

(a) Aluminum liner must be 6061 alloy and T6 temper. Cylinder constructed with aluminum liner 6351 before January 1, 1990 can remain in service if requalified in accordance with § 180.205.

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§ 178.AA-18 Design qualification tests.

(e) Not required for designs using 6061 T6 alloy with mechanical properties within plus or minus 2-1/2 percent of strength of 6351 alloy previously used.

b. INSPECTION AND REQUALIFICATION - Each cylinder must be reinspected and hydrostatically retested every three years in accordance with § 180.205, as prescribed for DOT 3HT specification cylinders, except that the rejection elastic expansion does not apply and the permanent volumetric expansion must not exceed 5 percent of the total volumetric expansion at test pressure. Retest dates must be stamped on the exposed metallic surface of the cylinder neck or marked on a label securely affixed to the cylinder and overcoated with epoxy near the original test date. Reheat treatment or repair of rejected cylinders is not authorized.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.

b. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.

c. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.

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- e. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.
 - f. Cylinders may not be used for underwater breathing purposes.
 - g. Cylinder service life must not exceed 15 years.
 - h. Cylinders used in oxygen service must be in compliance with § 173.302(b)(1) through (b)(4).
 - i. Cylinder must be packaged in accordance with § 173.301(a)(9).
 - j. A cylinder that has been subjected to fire must not be returned to service.
 - k. The transportation of oxygen by aircraft is only authorized when in accordance with § 172.102(c)(2) Special Provision A52 and §§ 175.85(h) and (i).
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft (See paragraphs 8 and 10 for restrictions).
10. MODAL REQUIREMENTS:
- (a) A current copy of this exemption must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this exemption. The shipper must furnish a current copy of this exemption to the air carrier before or at the time the shipment is tendered.
 - (b) Transportation of flammable gases is not authorized aboard passenger or cargo vessel, rail freight or passenger-carrying aircraft.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

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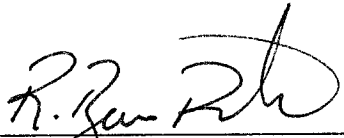
- o Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:


Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.
Attention: DHM-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: sln